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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,470	04/06/2001	Richard W. Layne	31752.01/551/SP00988.231	6760

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Medtronic
Attn: Noreen C. Johnson, IP Legal Department
2600 Sofamor Danek Drive
Memphis, TN 38132

EXAMINER

NGUYEN, CAMTU TRAN

ART UNIT	PAPER NUMBER
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3772

MAIL DATE	DELIVERY MODE
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02/03/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/828,470	LAYNE ET AL.	
	Examiner	Art Unit	
	Camtu T. Nguyen	3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,12 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 1,4,12,23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/28/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

This Office Action is responding to applicant's amendment filed on 11/17/2010. Claims 1 & 25 have been amended.

Response to Arguments

Amended claim 1 now recites the platform is formed a notch in the side surface thereof. Applicant remarked that Reiley/Berger rejection does not teach nor disclose such newly added limitations.

The claims, as amended, have been carefully considered but deemed not allowable in view of the following rejections.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: a notch configured to **interlockingly** receive a corresponding portion of the expandable structure.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

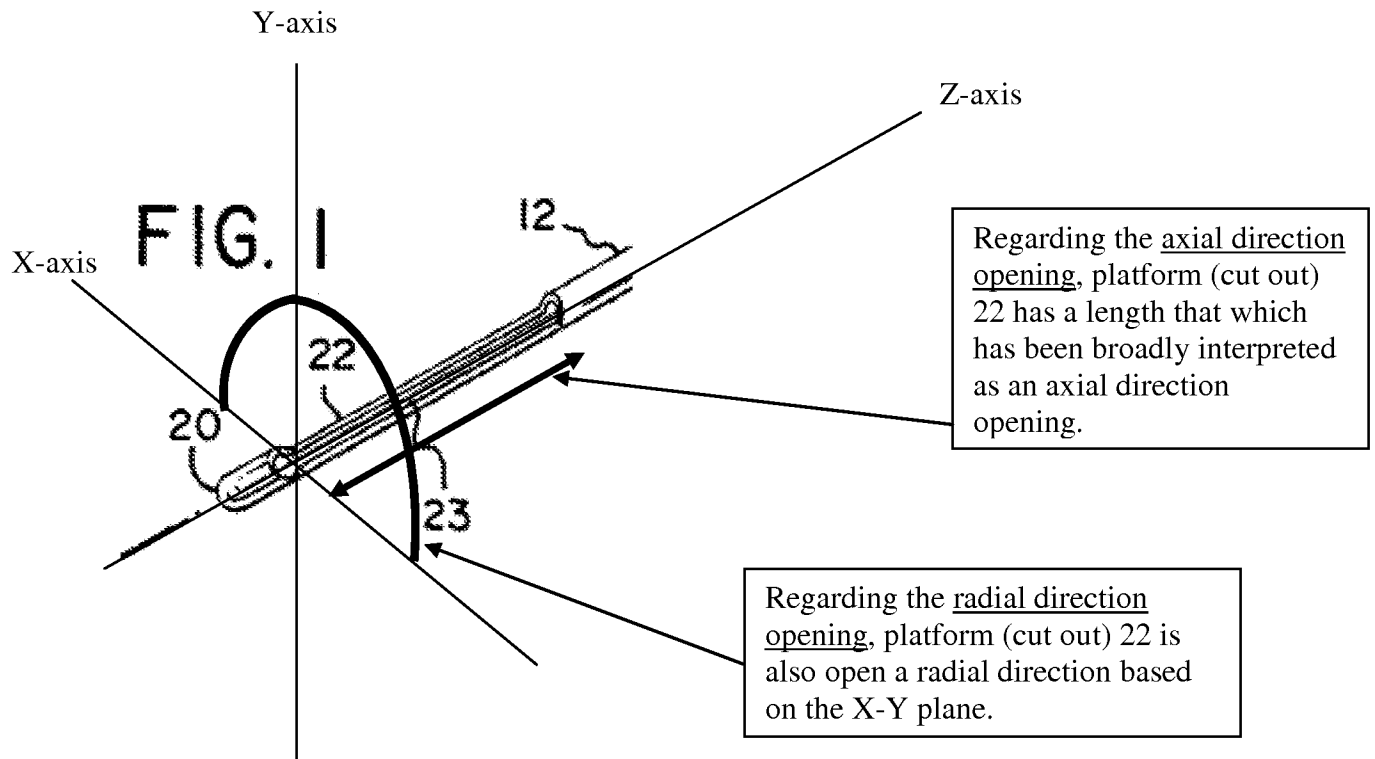
Claims 1, 4, 12, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiley et al (U.S. Patent No. 6,248,110) in view of Berger (U.S. Patent No. 5,545,136) and further in view of Taylor (U.S. Patent No. 4,147,169).

Reiley et al discloses Figure 4 a hollow body (50) including a circumferential wall having a distal end, the hollow body (50) also comprising an extension that protrudes from the circumferential wall beyond the distal end but the hollow body (50). Figure 4 illustrates an expandable (56) structure.

The Reiley et al does not teach a platform that is open in a radial direction and has a side surface facing the radial direction.

Berger discloses in Figures 1, 2 & 6 illustrates a hollow catheter (12), the distal end of the catheter is extended by a platform that is open (22) in a radial direction and has a side surface (23) facing in the radial direction.

Regarding claim 1 reciting the platform that is open in a radial direction to form a radial direction opening and in axial direction opening, see illustration below.



The interpretation above illustrates the axial direction opening is transverse to the radial direction opening.

Therefore, it would have been obvious to one skilled in the art to modify the distal end of Reiley et al's hollow body (50) such that it would include an extension/platform extending beyond the distal end, such extension/platform having an opening (22) open radially & a side surface, taught by Berger, for purposes of serving as a barrier to induce the balloon (25) to expand through the opening (22) radially away from the side surface of the platform (see Figure 6 in Berger reference).

Regarding claim 1 reciting securing the expandable structure to the platform in a manner to maintain a predetermined rotational orientation between the expandable structure and the platform, the Reiley/Berger discloses the expandable structure (25) associated with a balloon

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catheter (24), Figures 2-3 illustrates the balloon catheter (24) is secured lumen (16), see column 3 lines 57-59 in Berger reference, hence, the balloon structure (25) is also secured in opened platform (22), thereby, maintaining a predetermined rotational orientation between the expandable structure (25) and the opened platform (22).

The Reiley/Berger combination does not disclose a notch formed in the side of the platform and configured to interlockingly receive a corresponding portion of the expandable structure, as newly recited in claim 1.

Taylor discloses in Figure 5-7 a catheter (12) having notches (36, 38) formed in the side surface of catheter (12) for purposes of interlockingly receiving a portion (46, 48, 50, 52) of balloon (18).

Therefore, it would have been obvious to one skilled in the art during the time of the invention to modify the Reiley/Berger's hollow body (50) such that it includes a notch formed in the side surface thereof, as such accommodate the expandable/balloon structure (56).

With regards to claim 4, Reiley/Berger/Taylor combination discloses the expandable structure (56) displaces a portion of the cortical bone (28) within bone (32), see Figure 5K(1) in Reiley reference.

With regards to claim 12, bone filling material, such as artificial bone substitute or flowable synthetic bone material or methyl methacrylate bone cement is known in the art of bone filling.

With regards to claim 23, Reiley/Berger/Taylor combination discloses the hollow body (50) & its expandable structure (56) are introduced into a vertebral body (26) wherein the interior volume (30) thereof occupied by cancellous bone (32), see Figures 5K(1) in Reiley reference.

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With regards to claim 24, Reiley/Berger/Taylor combination, particularly, Reiley/Berger, now renders the catheter tube (50) having an extension/platform extends beyond the distal end of catheter tube (50) from only a circumferential portion of the catheter tube's (50) circumferential wall, yielding the extension/platform extending from only a circumferential portion of the catheter tube's (50) circumferential wall and not the entire circumferential wall.

The Reiley/Berger/Taylor combination would perform all of the steps in method claim 1.

Allowable Subject Matter

Claim 25 is allowed.

The following is an examiner's statement of reasons for allowance: the art of record when considered alone or in combination neither anticipates nor renders obvious a method comprising a step of forming a cavity in a second region of cancellous bone wherein the second region of cancellous bone includes expanding the expandable structure in the axial direction through the axial direction opening of the platform such that the expandable structure expands in the axial direction beyond the distal end of the platform.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Camtu T. Nguyen whose telephone number is 571-272-4799. The examiner can normally be reached on (M-F) 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Camtu T. Nguyen/
Examiner, Art Unit 3772

/Patricia Bianco/
Supervisory Patent Examiner, Art Unit 3772